

Magnesia-stabilized Zirconia Powder

Formula: ZrO₂/MgO

Mean Particle Size: 0.8µm

Weight: 100g

Stabilised With: 2.8% Magnesia

CAS Number: 114168-16-0

UOM Code: 413-632-76

SKU: 1000165561-group

Product Code: ZR62-PD-000110

Material Properties for Ceramics

Chemical Resistance

Element	Value
Acids - concentrated	Fair
Acids - dilute	Good
Alkalis	Good-Poor
Halogens	Fair
Metals	Good-Fair

Physical Properties

Element	Value
Apparent porosity(%)	0
Water absorption - saturation(%)	0
Density(gcm ³)	5.74

Thermal Properties

Element	Value
Upper continuous use temperature(C)	1000
Specific heat(J K ⁻¹ kg ⁻¹)	400-500@25°C
Thermal conductivity(W m ⁻¹ K ⁻¹)	1.5-2.5@20°C
Coefficient of thermal expansion(x10 ⁻⁶ K ⁻¹)	5-10@20-1000°C

Mechanical Properties

Element	Value
Tensile modulus(GPa)	200
Hardness - Vickers(kgf mm ²)	1200
Shear strength(MPa)	414
Tensile strength(MPa)	300

Pultrusions

Element	Value
Compressive strength(MPa)	1500-2000